

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-24 (Canceled).

Claim 25 (Currently Amended): A process for the production of anionic water-in-water polymeric dispersions comprising at least one finely dispersed, water-soluble and/or water-swellaable polymer A comprising anionic monomer units and, optionally, one or more of non-ionic, amphiphilic, and cationic monomer units having a  $M_w$  of  $>1.0 \times 10^6$  g/mol and a continuous aqueous phase, which phase contains an aliquot of at least one anionic polymeric dispersing agent B comprising at least 5 % 30% by weight of anionic monomers and having an average molecular weight  $M_w$  of not more than 250,000 g/mol, wherein the aliquot is present in an amount of at least 5% by weight, based on the weight of the total dispersion, of a polymeric dispersing agent B in which monomers that are distributed in this aqueous phase are subjected to free-radical polymerization the process comprising:

free radically polymerizing a monomer composition comprising at least the anionic monomers and, optionally, the non-ionic, amphiphilic, and cationic monomer to form a reaction mixture, and

on completion of said polymerization, diluting the reaction mixture is subsequently ~~diluted~~ with [[the]] a residual amount of said dispersing agent B,

wherein the anionic monomers are selected from the group consisting of

- a.) an olefinically unsaturated carboxylic acid, a carboxylic anhydride, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof;
- b.) an olefinically unsaturated sulfonic acid, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof;

- c.) an olefinically unsaturated phosphonic acid, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, an ammonium salt thereof; and
- d.) a sulfomethylated acrylamide, a phosphonomethylated acrylamide, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof.

Claim 26 (Currently Amended): A process as defined in claim 25, ~~characterized in that~~ wherein said polymeric dispersing agent B comprises at least one functional group selected from the group consisting of an ether groups group, a carboxyl groups group, a sulfone groups group, a sulfate ester groups group, an amino groups group, an amido groups group, an imido groups group, a tert-amino groups group, and a and/or quaternary ammonium groups group.

Claim 27 (Currently Amended): A process as defined in claim 26, ~~characterized in that~~ wherein said polymeric dispersing agent B is a cellulose derivative, polyvinyl acetate, starch, a starch derivative, dextran, polyvinylpyrrolidone, polyvinylpyridine, polyethylene imine, polyamine, polyvinylimidazole, polyvinylsuccinimide, polyvinyl-2-methylsuccinimide, polyvinyl-1,3-oxazolid-2-one, polyvinyl-2-methylimidazoline, ~~and/or the~~ a respective copolymers copolymer thereof with maleic acid, a copolymer thereof with maleic anhydride, a copolymer thereof with fumaric acid, a copolymer thereof with itaconic acid, a copolymer thereof with itaconic anhydride, a copolymer thereof with (meth)acrylic acid, a copolymer thereof with salts, an and/or esters of (meth)acrylic acid and and/or a copolymer thereof with a (meth)acrylamide compound.

Claims 28-29 (Canceled).

Claim 30 (Currently Amended): A process as defined in claim 25, ~~characterized in that wherein~~ the aliquot of said dispersing agent B in the aqueous phase is equal to from 60 to 95 % by weight of the total weight of said dispersing agent B.

Claim 31 (Currently Amended): A process as defined in claim 25, ~~characterized in that at least one wherein the~~ water-soluble polymeric dispersing agent B is ~~used together~~ present as a ~~mixture~~ with at least one water-soluble polyfunctional alcohol and/or its reaction product with fatty amines.

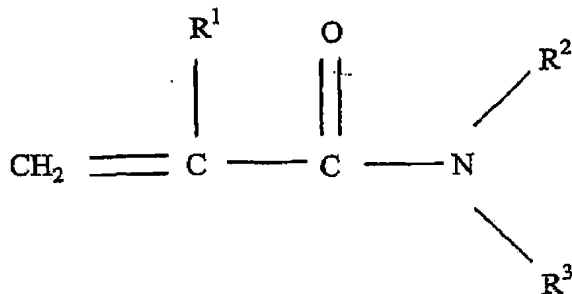
Claim 32 (Currently Amended): A process as defined in claim 31, ~~characterized in that the wherein the water-soluble polymeric dispersing agent is at least one of a water-soluble polyfunctional alcohol alcohols, used are a polyalkylene glycol glycols, a block copolymer copolymers of propylene/ethylene oxide having molecular weights of from 50 to 50 000, a low-molecular weight polyfunctional alcohol alcohols and/or their and~~ reaction products ~~thereof~~ with fatty amines containing from 6 to 22 carbons in the alkyl or alkylene radical.

Claim 33 (Currently Amended): A process as defined in claim 31, ~~characterized in that wherein~~ said polymeric dispersing agent B is ~~used together~~ present as a ~~mixture~~ with at least one polyfunctional alcohol in amounts of from 5 to 50 % by weight, based on the total dispersion.

Claim 34 (Currently Amended): A process as defined in claim 31, characterized in ~~that~~ wherein said the ratio, by weight, of said polymeric dispersing agent B to said polyfunctional alcohol is in the range of from 1.00 : 0.01 to 1.00 : 0.5.

Claims 35-36 (Canceled).

Claim 37 (Currently Amended): A process as defined in claim 25, characterized in that the wherein the polymeric dispersing agent B comprises at least one non-ionic monomer  
monomers used are monomers of the general formula (I)

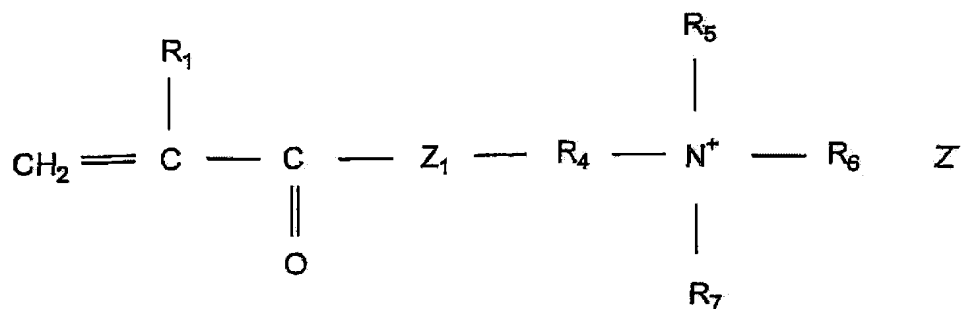


(I)

in which

R<sup>1</sup> stands for a hydrogen radical or a methyl radical, and  
R<sup>2</sup> and R<sup>3</sup> independently stand for hydrogen, or an alkyl or hydroxyalkyl radical  
containing from 1 to 5 carbon atoms, and  
R<sup>2</sup> or R<sup>3</sup> stands for an OH group.

Claim 38 (Currently Amended): A process as defined in claim 25, ~~characterized in that the~~ wherein the polymeric dispersing agent B comprises one or more amphiphilic monomers ~~used are monomers of the general~~ formula (II)



(II)

wherein  $Z_1$  stands for O, NH,  $NR_4$  wherein  $R_4$  denotes alkyl containing from 1 to 4 carbons,

$R_1$  stands for hydrogen or a methyl radical,

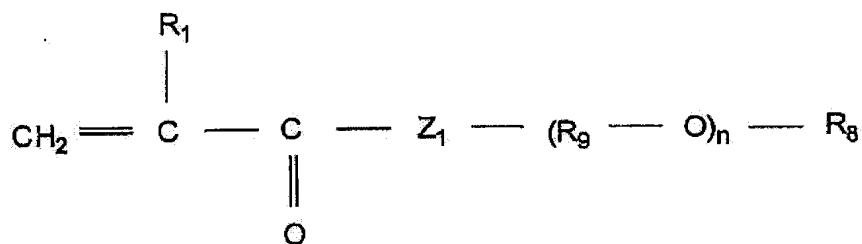
$R_4$  stands for alkene containing from 1 to 6 carbons,

$R_5$  and  $R_6$  independently stand for an alkyl group containing from 1 to 6 carbons,

$R_7$  stands for an alkyl radical, an aryl radical, and/or an aralkyl radical containing from 8 to 32 carbons and

$Z^-$  stands for halogen, pseudo-halogen,  $SO_4CH_3^-$  or acetate,

or monomers of the general formula (III)



(III)

wherein

$\text{Z}_1$  stands for O, NH, or  $\text{NR}_4$ , wherein  $\text{R}_4$  denotes alkyl containing from 1 to 4 carbons,

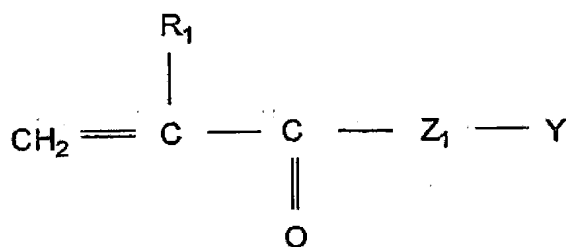
$\text{R}_1$  stands for hydrogen or a methyl radical,

$\text{R}_3$  stands for hydrogen, an alkyl radical, an aryl radical, and/or an aralkyl radical containing from 8 to 32 carbons,

$\text{R}_9$  stands for an alkylene radical containing from 2 to 6 carbons, and

$n$  stands for an integer from 1 to 50.

Claim 39 (Currently Amended): A process as defined in claim 25, ~~characterized in that wherein the polymeric dispersing agent B comprises the cationic monomers used are compounds of the general formula (IV)~~



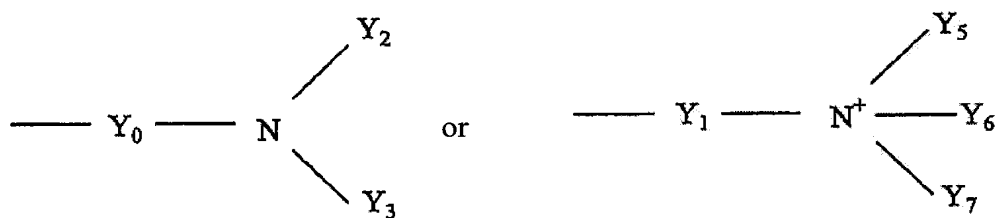
(IV)

wherein

$R_1$  stands for hydrogen or a methyl radical,

$Z_1$  stands for O, NH or  $NR_4$  where  $R_4$  stands for an alkyl radical containing 1 to 4 carbon atoms,

$Y$  stands for one of the groups



$Y_0$  and  $Y_1$  stand for an alkylene radical or hydroxyalkylene radical containing 2 to 6 carbon atoms,

$Y_2, Y_3, Y_4, Y_5, Y_6, Y_7$ , independently stand for an alkyl radical containing 1 to 6 carbon atoms, and

$Z^-$  stands for halogen, acetate, or  $SO_4CH_3^-$ .

Claim 40 (Currently Amended): A process as defined in claim 25, wherein  
~~characterized in that the monomeric monomer composition to be used for the production of~~  
~~said polymer A consists of anionic monomers, to an extent of from 0 to 100 % by weight,~~  
~~based on the total weight of monomers.~~

Claim 41 (Canceled).

Claim 42 (Currently Amended): A process as defined in claim 25, ~~characterized in~~  
~~that~~ wherein polymerization is carried out in the presence of a salt in an amount of not more  
 than 3.0 % by weight, based on the total dispersion.

Claim 43 (Currently Amended): A process as defined in claim 25, ~~characterized in that~~ further comprising:

cooling the reaction mixture ~~is cooled~~ following the polymerization and ~~[[is]]~~ subsequently ~~diluted with~~ diluting the reaction mixture with the residual amount of said dispersing agent B.

Claim 44 (Currently Amended): A process as defined in claim 25, ~~characterized in that~~ further comprising:

cooling the reaction mixture ~~is cooled~~ to  $\leq 35$  °C.

Claim 45 (Currently Amended): A process as defined in claim 25, ~~characterized in that~~ further comprising:

diluting the reaction mixture ~~[[is]]~~ subsequently ~~diluted~~ with from 5 to 50 % of said dispersing agent B by weight, based on the total weight thereof.

Claim 46 (Currently Amended): A water-in-water polymer dispersion ~~whenever~~ obtained as defined in claim 25.

Claim 47 (Currently Amended): The method of claim 25, further comprising: ~~using~~ including the water-in-water polymer dispersion as defined in claim 46 for solid/liquid separation in aqueous systems.

Claim 48 (Currently Amended): The method of claim 25, further comprising: ~~using~~ including the water-in-water polymeric dispersions as defined in claim 46 as an auxiliary in papermaking.



Claim 49 (Currently Amended): The method of claim 25, further comprising: using  
including the water-in-water polymer dispersion as defined in claim 46 in retention  
agent systems in papermaking.

Claim 50 (New): A process for producing a water-in-water dispersion of one or more  
at least one finely dispersed, water-soluble and/or water-swellaable anionic polymers A  
dispersed in a continuous aqueous phase, wherein the polymer A comprises one or more  
anionic monomer units and, optionally, one or more of a non-ionic, amphiphilic, and cationic  
monomer units and the polymer A has a  $M_w$  of  $>1.0 \times 10^6$  g/mol and, wherein the aqueous  
phase of the dispersion comprises at least one anionic polymeric dispersing agent B which  
comprises at least 30% by weight of one or more anionic monomers and has a weight average  
molecular weight  $M_w$  of not more than 250,000 g/mol, wherein the anionic polymeric  
dispersing agent B is the process comprising:

in a first stage, free radically polymerizing a monomer composition comprising at  
least the anionic monomer units and, optionally, the non-ionic, amphiphilic, and cationic  
monomer units in the presence of at least 5% by weight of the anionic polymeric dispersing  
agent B based on the total weight the dispersion, to form a reaction mixture, and

in a second stage, on completion of said radical polymerization, diluting the reaction  
mixture with a second amount of the anionic polymeric dispersing agent B to form the water-  
in-water dispersion,

wherein the anionic monomers are selected from the group consisting of

- a.) an olefinically unsaturated carboxylic acid, a carboxylic anhydride, a water-  
soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an  
ammonium salt thereof;

- b.) an olefinically unsaturated sulfonic acid, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof;
- c.) an olefinically unsaturated phosphonic acid, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, an ammonium salt thereof; and
- d.) a sulfomethylated acrylamide, a phosphonomethylated acrylamide, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof.